

SC2-VLP concentration using PEG precipitation

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 An abbreviated version of this protocol was published in Science in Nov 2021

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Detailed protocol

SC2-VLP concentration using PEG precipitation

1. Prepare PEG precipitation solution using 50% w/v polyethylene glycol 8000, 2.2% NaCl.
2. For each 100mL of VLP containing supernatant, add 13.63mL of precipitation solution. Final concentration will be 6% PEG. Mix thoroughly and cool for 2 hours at 4C. Incubations longer than 3hrs will result in debris and difficult to resuspend pellet.
3. Centrifuge at 2000g for 20 minutes. Remove the majority of supernatant and spin again at 2000g for 1 minute and remove the remaining supernatant.
4. Resuspend pellet in 1/100th volume of PBS. Pellet may require up to 10 minutes to resuspend.
5. Can proceed with infection on the same day or freeze and store at -80C.

How to cite: (Readers should cite both the Bio-protocol preprint and the original research article where this protocol was used)

1. Syed, A. , Ott, M. and Doudna, . A.(2022). SC2-VLP concentration using PEG precipitation. Bio-protocol Preprint. bio-protocol.org/prep2072.
2. Syed, A. M., Taha, T. Y., Tabata, T., Chen, I. P., Ciling, A., Khalid, M. M., Sreekumar, B., Chen, P., Hayashi, J. M., Soczek, K. M., Ott, M. and Doudna, J. A.(2021). Rapid assessment of SARS-CoV-2 evolved variants using virus-like particles. Science. DOI: [10.1126/science.abl6184](https://doi.org/10.1126/science.abl6184)

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